I do not see how this reissue can affect the issues in this suit, or protect the defendant in the manufacture or sale of such watches as are shown in evidence to be the product of the defendant company. The specifications, as amended by the reissue, show how a lever-set watch may be constructed as one form of the Sheridan device, but, as defendants' right to make a lever-set watch is not in question here, it does not seem necessary to consider or pass upon this feature of the case.

A decree may therefore be entered, finding that defendant the Illinois Watch Company has infringed the claims of the Church patent, as charged, and that complainant is entitled to an injunction and accounting, and that the bill be dismissed for want of equity as to the Colby patent, on the ground of non-infringement, and also dismissing the bill for want of equity as to the individual defendants Jacob Bunn, George A. Bates, and George C. Gubbins.

ROBBINS *et al.* v. COLUMBUS WATCH CO. *et al.*

(Circuit Court, S. D. Ohio, E. D. May 7, 1892.)

No. 506.

1. PATENTS FOR INVENTIONS—REISSUE—EXPANSION OF CLAIMS—WATCHES.

In reissued patent No. 10,631, granted August 4, 1885, to Robbins and Avery, claim 1 was as follows: "As an improvement in stem winding and setting watches, a winding and hands-setting train, which is adapted to be placed in engagement with the winding wheel or the dial wheels by the longitudinal movement of a stem arbor that has no positive connection with said train, substantially as and for the purposes specified." The first claim of the original patent was for the same, with the additional condition that the train is normally in gear with the setting wheels. *Held*, that the objection that the claims of the reissue are broader and more comprehensive than the original is obviated by the clause "substantially as and for the purpose specified," which relates back to the original specifications and drawings, and brings them into the claims. *Robbins* v. *Aurora Watch Co.*, 43 Fed. Rep. 526, followed.

2. SAME.

And hence claim 8, which is for "a winding and hands-setting train, which is adapted to be placed in engagement with the winding wheel or the dial wheels by the longitudinal movement of a stem arbor, and is normally in engagement with such dial wheels, substantially as and for the purpose set forth," is not objectionable for expansion on the ground that the corresponding claim of the original adds the condition that the winding arbor is without positive connection. *Robbins* v. *Aurora Watch Co.*, 43 Fed. Rep. 526, followed.

3. SAME—CLAIMS FOR RESULTS.

These claims are not objectionable as being claims for results or functions rather than for devices, for the concluding phrase relates back and includes in them the devices shown by the specifications and drawings of the original patent. *Robbins* v. *Aurora Watch Co.*, 43 Fed. Rep. 526, followed.

4. SAME—ANTICIPATION—WATCH WINDING AND SETTING MECHANISM.

Reissued patent No. 10,631, granted August 4, 1885, to Robbins and Avery, trustees, under mesne assignments from the inventor, Church, for an improvement in stem winding and setting watches, embodied the following elements: A winding and setting train, mechanically unconnected to a short stem arbor, capable of winding and setting the watch by its rotation; also adapted to be pushed into winding engagement by the inward movement of the stem arbor, and automatically shifting to the setting engagement whenever the stem arbor is withdrawn from its winding position. *Held*, that this was not anticipated by a patent to one Wheeler for a lever set movement, with a train shifted by means of a lever or finger bar from the winding to the setting engagement, which train, however, cannot be shifted by a longitudinal movement by the stem arbor, for its arbor has no such movement, and no relation to the train by which such a movement could produce the desired result.

5. SAME—INFRINGEMENT—MECHANICAL EQUIVALENT.
This reissue to Robbins and Avery, being valid, and covering a patentable novelty, is infringed by a stem setting and winding movement used by defendant the Columbus Watch Company, whose elements are either the same or the mechanical equivalents of those of the patent.

6. SAME—LICENSE.
Though defendants sold their infringing movements for use in a watch case of which plaintiffs owned the patent, it did not thereby become an infringer of the case, where the sales were made to persons licensed by plaintiffs to manufacture such case.

In Equity. Bill by Royal E. Robbins and Thomas M. Avery, trustees, against the Columbus Watch Company, David Green, and William J. Savage, for infringement of patents. Decree for complainants as to one patent, and for defendants as to the other.

Lysander Hill and *Prindle & Russell*, for complainants.

M. D. Leggett and *Watson, Burr & Livesey*, for defendants.

SAGE, District Judge. This suit is for the infringement of two patents, as follows: (1) Reissued patent No. 10,631, for stem-winding watch, issued August 4, 1885, on application filed March 14, 1885, to Royal E. Robbins and Thomas M. Avery, trustees, under mesne assignments from D. H. Church, the inventor. (2) Patent No. 287,001, to C. K. Colby, for watch pendant, issued October 23, 1883, upon application filed February 1, 1883.

Reissued patent No. 10,631, is for certain devices used in stem-winding watches, and relates more particularly to structures in which the winding and hands-setting mechanism is operated by means of a stem arbor. It is set forth in the specification that prior to the improvement described the winding and hands-setting train had been normally in engagement with the winding wheel, and disconnected from the dial wheels, so that an outward movement of the stem arbor was necessary in order to change the engagement of the train, and adapt it for setting the hands. In that construction a positive connection between the stem arbor and the winding and hands-setting train was requisite, else the arbor when drawn outwardly would not effect the change in the engagement of the train from winding to setting; and this positive connection made the stem arbor virtually a part of the movement. It resulted that it was difficult and expensive to change the movement from one case to another. One object of the improvement is, as it is set forth in the specification, to render watch movements interchangeable. The drawings show a winding wheel, C, and a hands-setting wheel, D. An oscillating yoke, pivoted on the axis of a cogwheel, F, and having at each end a cogwheel, one designated as G and the other as H, when swung in one direction, brings the wheel G into engagement with the winding wheel, C, and, swung in the opposite direction, brings the wheel, H, into engagement with the dial or hands-setting wheel, D. L is a crown wheel, always in engagement with the middle wheel, F, of the yoke train. It is mounted on a hollow arbor, which presents at the edge of the watch movement an open end, squared, so as to be rotated by the square end of the stem arbor, M. The hole in the hollow arbor of the crown wheel extends

through the wheel, and in the inner portion of this wheel is located a longitudinally movable stud or block, N. A rotable arbor, I, carries two lateral arms, i^1 and i^3, in position to bear on opposite ends of the yoke, E, and is provided with two arms, i and i^2, beneath the front plate of the movement, but indicated in the drawings by dotted lines. A spring, K, bears against the arm i, and through said arm rotates the arbor, and causes the arm i^1 to bear against the adjacent end of the yoke, E, thereby bringing the wheel, H, into engagement with the dial wheel, D. The stem arbor is not attached to—that is to say, has no positive connection with—the winding and hands-setting train. When "moved longitudinally to the inner limit of its motion," or, in other words, pushed in, it causes the train to be disengaged from the dial wheel and engaged with the winding wheel; and when pulled out, or, in the phrase of the specification, "moved longitudinally to the outer limit of its motion," it is drawn away from the train, which thereupon automatically assumes the position which brings the wheel, H, into engagement with the dial wheel, D. This is the normal engagement of the train, and it is actuated by the spring, K. The arm, i^2, extends in the path of the movable block or stud, N, so that, when N is pushed inward, the arbor, I, is turned in the opposite direction, thereby causing the arm, i^3, to bear against the opposite end of the yoke, and bring the wheel into engagement with the winding wheel, C, at the same time withdrawing the wheel H from engagement with the dial wheel, D. In other words, the pushing in of the stem arbor, M, and thereby also the stud or block, N, and the arm, i^2, shifts, by the means above described, the train from its normal engagement with the hands-setting wheel into the forced engagement with the winding wheel.

All the parts above mentioned, excepting the stem arbor, M, belong entirely to the watch movement or "works." The stem arbor is mounted in the stem or pendant, which is a part of the case, and it is held in its different positions by yielding springs, which it is not necessary to particularly describe. The squared inner end of the stem arbor projects inwardly a short distance beyond the circle of the case, and is inserted in the outer end of the hollow arbor of the crown wheel, L. The method of winding and setting when the engagements have been properly made is substantially as in other stem-winding watches.

The movement or works may be removed from the case by turning the retaining screws to their proper positions for that purpose, then tilting the movement out at the side opposite the stem, drawing it away from the stem, and lifting it out. To insert it into the same or another similar case, the edge of the movement at which is located the open crown wheel arbor is lowered to a position opposite the stem arbor, and the movement is then pushed along towards the stem, so as to insert the stem arbor into the hollow hub of the crown wheel, L. The opposite edge of the movement is then lowered into position in the case, and the retaining screws so turned as to hold it.

It is contended for the complainants that spring arm, i^3, which extends from the upper end of the arbor, I, to or near the end of the yoke, which

carries the wheel, G, so modifies the pushing effect of the arbor upon the train yoke as to prevent undue violence or injury to the gears, the spring being so light and flexible as by its yielding to render impossible any contact of the teeth violent enough to cause injury.

The claims are as follows:

"(1) As an improvement in stem winding and setting watches, a winding and hands-setting train, which is adapted to be placed in engagement with the winding wheel or the dial wheels by the longitudinal movement of a stem arbor that has no positive connection with said train, substantially as and for the purpose specified.

"(2) As an improvement in stem winding and setting watches, a winding and hands-setting train, which is adapted to be placed in engagement with the winding wheel or the dial wheels, and is normally in engagement with said dial wheels, substantially as and for the purpose shown.

"(3) As an improvement in stem winding and setting watches, a winding and hands-setting train, which is adapted to be placed in engagement with the winding wheel or the dial wheels by the longitudinal movement of a stem arbor, and is normally in engagement with said dial wheels, substantially as and for the purpose set forth.

"(4) As an improvement in stem winding and setting watches, a winding and hands-setting train which is normally in engagement with the dial wheels, in combination with a rotable stem arbor that has no positive connection with said train, and is adapted to be moved longitudinally within the case stem, to cause said winding and hands-setting train to engage with the winding wheel, and to be simultaneously disengaged from said dial wheels, substantially as and for the purpose shown and described.

"(5) As an improvement in stem winding and setting watches, a winding and hands-setting train, which is normally in engagement with the dial wheels, in combination with a rotable longitudinally movable stem arbor that has no positive connection with the watch movement, and when moved longitudinally to the inner limit of its motion will cause said winding and setting train to be disengaged from said dial wheels and engaged with the winding wheel, and when moved longitudinally to the outer limit of its motion will permit said train to be disengaged from said winding wheel and engaged with said dial wheels, substantially as and for the purpose specified.

"(6) As an improvement in stem winding and setting watches, the combination of a winding and hands-setting train, which is normally in engagement with the dial wheels, a stem arbor, having no positive connection with said train, and an intermediate device, which is adapted to communicate the longitudinal inward movement of said stem arbor to said winding train, and cause the same to engage with the winding wheel, substantially as and for the purpose shown and described."

It is conceded that the second claim is not in issue in this cause, and it need not be further considered.

The Colby invention relates to devices for the retention of stem arbors in the stems or pendants of watch cases, and at the same time allowing the arbors to be rotated and longitudinally moved in the stem. The first claim of the patent, which sets forth the essential features of the invention, is as follows:

"The combination in a stem-winding watch, of the tubular stem, a key mounted to rotate in said stem, and to project into the movement and engage the winding arbor, as shown, a spring attached to one of these parts, and ar-

ranged to engage the other part to form a latch device, as shown, and the said winding arbor, all arranged substantially as and for the purposes set forth."

The key referred to in the claim is the stem arbor. The winding arbor is that part of the watch movement with which the stem arbor by its rotation directly engages in winding the watch. The special feature of improvement set forth in this patent is the location of a spring for engaging the key or stem arbor with and within the stem. The spring latch device permits the rotation of the stem arbor for winding or setting the watch, and also permits it to be partly withdrawn, longitudinally, from the winding arbor. The patent also provides for two sets of grooves or corresponding projections, forming, to quote from claim 3, "an elastic device, whereby the key may be held in either of two positions in the stem."

It is not necessary to set forth the second and third claims of this patent, nor to enter more particularly into the details of the construction of the patented device.

The defenses as to the Church reissue, No. 10,631, are, stating them in the order in which they will be considered, as follows:

That the reissue was improperly granted, in that the original letters patent were not inoperative or invalid by reason of such defective or insufficient specification as could be corrected by reissue; that they were not surrendered to correct any error which had arisen by inadvertence, accident, or mistake; that new matter, not constituting any substantial part of the alleged invention for which the original letters patent were granted, was introduced into the specification and claims of the reissue; that between the date of the original letters and the date of the application for the reissue certain inventions were made and devices brought into use that were not covered by the claims of the original, but were sought to be covered by and subordinated to the claims of the reissue; that the claims of the reissue do not particularly point out and distinctly claim the part improvement or combination which Church claimed as his invention, but merely specify results or functions, and not devices. The original patent has but four claims; the reissued patent has six. Referring to the testimony of the defendant's expert, it appears that the objection that the first, second, and third claims of the reissued patent are additional to, and broader and more comprehensive than, any claim of the original patent, is founded upon a verbal criticism of the language of the claims which is altogether too narrow and technical; as, for illustration, that the first claim in the reissued patent specifies as new a winding and hands-setting train, shifted by the longitudinal movement of the winding arbor without positive connection, whereas the claim in the original patent was for the same, only coupled with the additional condition that the train is normally in gear with the setting wheels; and passing by what is said of the second claim, because that claim is not involved in this suit, that the third claim in the reissued patent specifies as new a winding and setting train, shifted by the longitudinal movement of the winding arbor, and normally in gear with the setting wheels, whereas the original patent

claims the same only when coupled with the additional condition that the winding arbor is without positive connection.

As to these objections, and the further objection that the claims of the reissued patent specify results or functions, and not devices, it is only necessary to refer to the decision by Judge BLODGETT sustaining the patent sued on in this case, in *Robbins* v. *Aurora Watch Co.*, 43 Fed. Rep., at page 526, where he calls attention to the rule that claims must be so construed as, if possible, to uphold a patent; and that in the light of this rule the first claim of the reissued patent cannot be held to refer to any kind of a winding or hands-setting train, but must be limited to such a one as is shown in the specification and drawings of the patent. As Judge BLODGETT well says:

"This explanation applies to all the claims, if they are to be read in the broadest sense in which their language is capable of being understood. Then they are obnoxious to the criticism that they are claims for results, and not for devices. But the words 'substantially as and for the purpose shown' take us back to the specification and drawings, and bring the device there shown into the claims, and I construe the claim as for the device there shown. Therefore, while these claims are broad, I think they can be sustained as for the devices which are described. *Corn Planter Patent*, 23 Wall, 218."

Judge BLODGETT, in the same paragraph, says that—

"If the claim is held to mean any winding and setting train adapted to be put into winding and setting engagement by a longitudinal movement of the stem arbor, which has no positive connection with the train, then it would manifestly be anticipated by the Woerd and Carnahan patents, and perhaps other inventors, who show winding and setting trains adapted to be placed in winding and setting engagements by endwise movement of the stem arbors, that have no positive connection with such trains."

But, under the construction and limitations which he properly applies, the alleged anticipations fail, as do also the Varney patent, applied for January 12, 1885, and dated August 11, 1885, and the Corliss patent, applied for June 18, 1885, and dated September 1, 1885, which are the inventions claimed to have been made and devices brought into use between the date of the original and the date of the application for the reissued patent, and not covered by the claims of the original, but sought to be covered by and subordinated to the claims of the reissue.

The testimony of the defendants' expert is sufficient to establish that the fourth and sixth claims of the reissue are not void for expansion, and that the fifth claim of the reissued patent is not broader than the first in the original patent, which appears as the fourth in the reissue. Construing the claims with the limitations above specified, they are not anticipated by those patents, nor by the Vent patent, No. 318,329, dated May 19, 1885, or the Galentine patent, No. 314,288, dated March 24, 1885. The objections to the validity of the reissue are not well founded, and they are overruled.

This brings us to the defenses that the patent is void for want of novelty, the claims being anticipated by various patents; that it does not disclose any patentable invention, the alleged improvements being

the product of mere mechanical skill; and that the combinations shown in the various claims are mere aggregations of mechanical features, which perform only the functions they performed in older combinations.

In considering the defense of anticipation, the limited construction given to the claims in *Robbins* v. *Aurora Watch Co.* will be followed.

Of the patents cited on behalf of defendants in support of the defenses above specified, the following were considered in *Robbins* v. *Aurora Watch Co.*, the English patent to Nicole, and the United States patents to Lehman, Carnahan, Woerd, Brez, Fitch, and Eisen.

In the opinion in *Robbins* v. *Aurora Watch Co.* it was pointed out that in the Nicole patent, the Lehman patent, the Carnahan patent, and the Woerd patent the stem arbor had a positive connection with the winding and the setting trains, and that the winding and hands-setting engagements were effected by the pull and push of a longitudinally moving stem arbor; while Church was the first in the art to interpose springs which by their yielding pressure would bring about the engagements without the possibility of such collision of the teeth of the wheels as to cause injury.

The Church patent, as set forth in the specification and claims, contains the following elements: A winding and setting train, mechanically unconnected to a short stem arbor, capable of winding and setting the watch by its rotation; also adapted to be pushed into winding engagement by the inward movement of the stem arbor, and automatically shifting to the setting engagement whenever the stem arbor is withdrawn from its winding position. To sustain the defense of anticipation, therefore, there must be found in the prior art some one patent or watch containing all these elements. The defendants' expert, upon cross-examination, admits that they are all to be found in the complainants' patent, and that the combination above set forth is not to be found in any one prior watch. Several patents are shown, exhibiting a stem arbor, sliding to shift the engagements, and rotating to wind or set the watch; but of the entire list only two, the Woerd and the Eisen, have short stem arbors unattached to any portion of the watch movement. Both these patents, however, have the normal winding engagement.

The Wheeler patent, upon which much stress was laid by counsel for the defendants, and which was not referred to in the opinion in *Robbins* v. *Aurora Watch Co.*, although in evidence in that case as illustrating the prior art, is for a lever set movement. It shows an oscillating yoke, at one end of which is a spring, N, and at the other a pivoted pawl, against which, when the lever is drawn out, a spring, H, by its pressure forces the opposite end, E, of the yoke in, and brings the movement into hands-setting engagement, which is the normal engagement. There is in evidence also an exhibit, showing the Wheeler and Colby patents combined, by removing the lever, and adapting the movement to the Colby arbor, thus furnishing an excellent illustration of how easily what the inventor did could have been done earlier, if only the light which first dawned on him had come to those who preceded, but did not an-

ticipate, him. The Wheeler movement, being for a lever-set watch, does not contain the features of construction which distinguish a stem-set watch. When placed in a case suitable for it, its train cannot be shifted by a longitudinal movement of the stem arbor, because the stem arbor has no longitudinal movement for this purpose, and no relation to the train by which such a movement could produce this result. Spring, N, bears against the end, D, of the yoke, and by its pressure, when the lever is pushed in, brings the yoke train into winding engagement and holds it there. The withdrawal or out-pull of the lever releases the pivoted pawl or dog, G, which is thereupon swung to the left by the pressure of spring, H, which is stronger than and overcomes the opposite pressure of spring, N, and by a cam action of the pawl, G, on the end, E, of the yoke, swings the yoke into hands-setting engagement, the spring, N, not perceptibly limiting or retarding, but in fact cushioning, this movement. The lever, or, as it is termed in the Wheeler patent, the "finger bar," is not a stem arbor, nor has it the movement or function of a stem arbor. Its office is, exclusively, to shift the train. Without the conception embodied in the Church patent, the Wheeler movement never could have been adapted to a stem-set watch. To reorganize or make a new adaptation of an old device by the aid or in the light of the conception of a subsequent patented invention, and then insist that it is an anticipation, is, in effect, to attempt to appropriate, as common property, the conception, which is always—excepting, possibly, in some cases of unlooked for or accidental discovery—the genesis of the invention, and is within the protection of the patent as completely as the embodiment itself. If it were not so, there would be but little left of the law of equivalents.

Of the other patents cited as anticipations it is not necessary to speak in detail. The defendants' expert testifies that the closest approximation to the Church watch is to be found in the Woerd watch, which was held in *Robbins* v. *Aurora Watch Co.* not to be an anticipation. Independently of the rule of judicial comity,—to which, however, I give full and hearty recognition,—I am not in the least disposed to dissent or depart from that holding.

The three important advantages claimed for the complainants' patent are—*First*, the winding and setting, and the winding and setting engagements, both effected through a stem arbor; *second*, a watch movement removable from the case, and interchangeable, without taking it apart; *third*, effecting and shifting the engagements without disturbing the hands or injuring the wheel gears.

Winding and setting, and winding and setting engagements, effected through a stem arbor, are shown in patents prior to Church's, as are also movements which may be taken out entire from the watch case. But the defendants insist that the advantage of effecting and shifting the engagements without disturbing the hands or injuring the hands-setting gears is neither claimed nor mentioned in the letters patent, and that, as a matter of fact, there is not the slightest danger of any injury to the wheels, and that there is therefore no need of protection, and none af-

forded by Church's device. In support of this statement of fact defendants refer to the depositions of a number of experienced watch makers and repairers, who concur in testimony that they have never known of the dial wheels of a lever set watch being injured in effecting the setting engagement, and that there is practically no danger of causing such injury in effecting such engagement in the pendant set watch, with a positive connection, because of the necessary loose placing of all the stem-winding wheels, and because the teeth or cogs are rounded on both sides to a point, and the spaces between them wider than the thickness of a tooth; and for the further reasons that the wheels must have some play to make the operation of setting and winding possible and easy, and that the distance of the pull of the stem arbor is so limited that the train cannot be moved any further than is necessary for proper gearing; also, that if the wheels should not mesh properly or fully the teeth would collide upon the rounded parts, and, as the wheels are loose, there would be a giving away, so as to allow them to slip into place every time. One of the witnesses, however, testified that the small gears of the setting wheels were sometimes injured, but he gave an explanation referring it to another cause. There is no direct testimony in conflict with that cited above, but there is evidence in the record which is relied upon to break its force. It is now more than eight and a half years since the granting of the original patent to Church's assignee, and more than six and a half since the reissue. It appears from the testimony for the complainants that the Elgin Watch Company makes 98 per cent. of its open-faced watches pendant set, with the Church improvement, and the Waltham Watch Company makes its entire open face product pendant set, with the Church improvement. These are two of the largest watch manufacturing companies in the United States. Most of the witnesses called by the defendants who testified as above also expressed the opinion that the complainants' movement is no better than the old-fashioned lever set movement, which has been almost superseded. It would hardly follow, if the court should adopt their view, that it must, to be consistent, hold all patents for pendant sets invalid. As to the testimony of the witnesses, skilled and credible though they may be, that there is no practical advantage in the spring attachments of the complainants' patent, it is more than counterbalanced by the testimony relating to the manufacture and sales.

The general recognition by manufacturers, including the defendants, and by the trade, of the value of the springs, dating back to the days of the lever set watches, justifies the conclusion that the daily shifting of the yoke train by the push and pull of the stem arbor, with no spring to modify or limit its force, even if it would not bend or break the teeth of the gearing wheels, must, by the constant succession of shocks or jars, or by some other means, tend to injure or wear, or shorten the life or impair the accuracy of, the delicate mechanism of the works; whereas, by the interposition of the springs, every movement of the train is so graduated and cushioned that no shock or injury is possible, and the wear is reduced to the minimum. The objection that none of these

advantages are either claimed or mentioned in the letters patent is not tenable. The construction is shown and claimed, and that the patentee is entitled to all the advantages which that construction affords, although not specified, or even known to the inventor, is too well settled to need verification or to be disputed. The complainants' device is by no means a mere aggregation. It is a combination, in which the elements are in new relation to each other, and so co-operate as to practically perfect the pendant set watch, by removing the disadvantages before then attendant upon the use of the stem arbor to shift the engagements. The objections made to the claims *seriatim* need not be considered in detail. They rest largely upon the broad construction of their language, which counsel for the defendants seek to apply, but they fail, under the construction of the claims given by Judge BLODGETT in *Robbins* v. *Aurora Watch Co.*, hereinbefore approved and followed, and in the later case of *Robbins* v. *Illinois Watch Co.*, 50 Fed. Rep. 542, in which his opinion was filed January 4, 1892.

We come now to the question of infringement. The movements made and sold by the defendants are adapted to the Colby Case. The winding and setting train shows two intermeshing wheels, mounted on a vibrating yoke, the axis of vibration being the axis of one of said wheels, which is in constant engagement with the wheel or pinion which is engaged by the stem arbor. The second wheel is swung by the movements of the yoke either into engagement with the winding wheel or into engagement with the setting wheel. The form of the yoke plate differs, but not essentially, from that of the Church patent. For the purpose of swinging the yoke train into hands-setting engagement, a spring is employed at the right hand of the movement,—the side at which the spring, K, is located in the Church movement,—and bearing at its free end against a smaller plate at the right hand of the yoke. This plate vibrates on a pivot, and acts as a cam lever upon a projection of the yoke plate. The yoke plate is also acted upon by a less powerful spring at its left-hand side, tending to swing it into winding engagement, but, when both are free to act, it is overcome by the spring at the right, and the yoke train is swung into its normal or hands-setting engagement.

The movement also contains a lever pivoted between its ends and provided at one end with a stud, which projects loosely into the hollow of the initial train wheel corresponding to crown wheel, L, in the Church patent, said stud corresponding functionally to block or stud, N. This lever vibrates under the inward movement of the stem arbor, and causes the cam plate to vibrate against the force of the spring corresponding to spring K, and so turns the cam plate that the yoke is free to swing into winding engagement under the pressure of the weaker spring at the left, which performs the office of spring, i^3, in the Church patent. The withdrawal of the stem arbor leaves the springs free to act, with the result of bringing the train into hands-setting engagement, as already stated. In all these particulars the mode of operation is the same as that of the Church movement. The engagement springs are, it

is true, differently arranged, but there is no material difference. The movements are substantially alike. The mechanical combinations correspond, element for element, and, comparing the elements, they are, in every instance, either the same in both, or the mechanical equivalents of each other. It must be held, therefore, that the defendants' movement is an infringement of the 1st, 3d, 4th, 5th, and 6th claims of the Church patent.

The only remaining question is whether the defendants infringe the Colby patent. That their watch movements were made and sold for use in connection with watch cases and pendants and winding stems, which have been licensed by complainants under the Colby patent, is a fact stipulated in this cause, as are also the facts that the defendant company makes only watch movements, and that it has not, nor have either of the individual defendants, ever made or sold watch cases, nor stem or pendants. Counsel for complainants argue that the fact that the watch cases are made under licenses, and are everywhere on sale, cuts no figure, for the reason that the license only releases the cases manufactured under it from the control of the patent, and makes them free to the public, just as the hammock and ropes were in *Travers* v. *Beyer*, 26 Fed. Rep. 450, the lamp chimney in *Wallace* v. *Holmes*, 9 Blatchf. 65, and the syrups and mineral waters in *Bowker* v. *Dows*, 3 Ban. & A. 518. The distinction between those cases and this case was clearly pointed out by Judge SHEPLEY in *Saxe* v. *Hammond*, Holmes, 458, where he said that, if all the other conditions were on the side of infringement, there must be the additional element of a sale for use by an unlicensed manufacturer, which was not proven in that case, and is negatived by the stipulation in this case. The true rule was stated in that case as follows:

"Different parties may all infringe by respectively making or selling, each of them, one of the elements of a patented combination, provided those separate elements are made for the purpose and with the intent of their being combined by a party having no right to combine them."

In *Alabastine Co.* v. *Payne*, 27 Fed. Rep. 559, it was held that the sale of a compound which could not be practically applied without making the user an infringer, and therefore trespasser, rendered the defendant an accessory to the infringement. But here the principal is the licensee of the Colby patent, and no trespasser, and there is no infringement of that patent to which defendants could be parties, or, as the court expressed it in that case, accessories. It might as well be claimed that the defendants, by selling their movements to the complainants themselves, the owners of the Colby patent, were guilty of the infringement of that patent.

The decree will be for the complainants upon the Church patent, and for the defendants upon the Colby patent.

THE ANNIE R. LEWIS.

HALL *et al.* *v.* SHEPPARD *et al.*

(District Court, D. Massachusetts. May 30, 1892.)

No. 81.

WHARVES AND WHARFINGERS—OBSTRUCTION—LIABILITY OF WHARFINGER.

A schooner drawing 11 feet 8 inches, loaded with coal owned by and consigned to the respondents under a bill of lading guarantying to her generally 12 feet of water, arrived at respondents' dock. One of the respondents was present at the schooner's arrival, but said nothing to the master. The latter was unacquainted with the obstructions and the tides at the place. The schooner struck a ledge of rock on which at average tides the water was 12 feet deep. Respondents did not own the bed of the river, but dredged it, and occupied and used the wharf to berth vessels. *Held*, that the master had a right to rely on the respondent who was present, and his silence amounted to an express invitation to enter. *Held*, therefore, that respondents were liable.

In Admiralty. Libel by Samuel P. Hall and others against Joel F. Sheppard and others for damages occasioned by stranding at respondents' wharf. Decree for libelants.

Edward S. Dodge, for libelants.

Frederick Cunningham, for respondents.

NELSON, District Judge. This is a libel *in personam* by the owners of the schooner Annie R. Lewis for injuries sustained by the schooner in entering the respondents' dock. The respondents are coal dealers, and own a private wharf on Monatiquot river, in East Braintree, at the head of navigation, where they receive the delivery of cargoes of coal from vessels. On the early morning of June 22, 1886, the Annie R. Lewis, from Port Johnson, arrived in the river below the wharf, in charge of a pilot and a towboat, having on board a cargo of 355 tons of coal consigned to and owned by the respondents, to be unloaded on the wharf. The bill of lading guaranteed 12 feet of water. The draft of the schooner was 11 feet 8 inches aft. In the bottom of the river a ledge of rocks extended from the lower end of the wharf, across the channel, to the opposite bank. On average tides the depth of water on the rock was 12 feet, but when the tides run low the depth was not sufficient to float vessels drawing 11 feet 8 inches. This was known to the respondents. The master of the schooner was unacquainted with the obstructions in the channel, and also with the run of the tides in the river. The tide on this morning was lower than the average. One of the respondents was present on the wharf, at the time, observing what was going on. The channel was about 50 feet wide. While the tug was attempting to haul the schooner into her berth alongside the wharf, where the coal was to be unloaded, the tide being then at its full height, she grounded on the ledge, and sustained injury. The respondents claim that the attempt to enter was made after the tide had ebbed considerably; also that the guaranty in the bill of lading extended only to average tides. Reference was made to the tide tables at Boston, to show that the tide was on the ebb. But tides in this narrow and crooked river, so far above the sea, must vary